



Facility Condition Assessment

West Warwick - John F. Deering Middle School

June 2017

2 Webster Knight Drive, West Warwick, RI 02893





Introduction

John F. Deering Middle School, located at 2 Webster Knight Drive in West Warwick, Rhode Island, was built in 1971. It comprises 138,600 gross square feet. Each school across the district was visited three times during the Facility Condition Assessments by three teams of specialists in the spring/summer of 2016.

John F. Deering Middle School serves grades 5 - 8, has 50 instructional spaces, and has an enrollment of 1,000. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for John F. Deering Middle School is 1,050 with a resulting utilization of 95%.

For master planning purposes a 5-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For John F. Deering Middle School the 5-year need is \$15,374,324. The findings contained within this report resulted from an assessment of building systems performed by building professionals experienced in disciplines including: architecture, mechanical, plumbing, electrical, acoustics, hazardous materials, and technology infrastructure.



Figure 1: Aerial view of John F. Deering Middle School



Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

Current Deficiencies: Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

Life Cycle Forecast: Life cycle analysis evaluates ages of a building's systems to forecast system replacement as they reach the end of serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

Discipline Specialists

All assessment teams produced current deficiencies associated with each school. The assessment for the school facilities at the Rhode Island Department of Education included several specialties:

Facility Condition Assessment: Architectural, mechanical, and electrical engineering professionals observed conditions via a visual observation that did not include intrusive measures, destructive investigations, or testing. Additionally, the assessment incorporated input provided by district facilities and maintenance staff where applicable. The assessment team recorded existing conditions, identified problems and deficiencies, documented corrective action and quantities, and identified the priority of the repair in accordance with parameters defined during the planning phase. The team took digital photos at each school to better identify significant deficiencies.

Technology: Technology specialists visited RIDE facilities and met with technology directors to observe and assess each facility's technology infrastructure. The assessment included network architecture, major infrastructure components, classroom instructional systems, necessary building space and support for technology. The technology assessment took into account the desired technology outcome and best practices and processes to ensure results can be attained effectively.

Hazardous Materials: Schools constructed prior to 1990 were assessed by specialists to identify the presence of hazardous materials. The team focused on identifying asbestos containing building materials (ACBMs), lead-based painted (LBP) areas, polychlorinated biphenyls (PCBs), and chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. If sampling and analysis was required, these activities were recommended but not included in the scope of work.

Traffic: A traffic specialist performed an in-office review of aerial imagery of the traffic infrastructure around the facilities in accordance with section 1.05-7 in the Rhode Island School Construction Regulations and reviewed data collected on site during the facility condition assessment. Based on this information, deficiencies and corrective actions were identified. High problem areas were identified for consideration of more detailed site-specific study and analysis in the future.

Acoustics: Specialists assessed each school's acoustics, including architectural acoustics, mechanical system noise and vibration, and environmental noise. The assessment team evaluated room acoustics with particular attention to the intelligibility of speech in learning spaces, interior and exterior sound isolation, and mechanical system noise and vibration control.

Educational Program Space Assessment: Teams evaluated schools to ensure that that all spaces adequately support the districts educational program. Standards are established for each classroom type or instructional space. Each space is evaluated to determine if it meets those standards and a listing of alterations that should be made to make the space a better environment for teaching and learning was created.



System Summaries

The following tables summarize major building systems at the John F. Deering Middle School campus, identified by discipline and building.

Site

The site level systems for this campus include:

Site	Asphalt Parking Lot Pavement
	Asphalt Roadway Pavement
	Asphalt Pedestrian Pavement
	Concrete Pedestrian Pavement

Building Envelope

The exterior systems for the building(s) at this campus includes:

01 - Main Building:	Ceramic Tile Exterior Wall
	Painted Exterior Wall
	Pre-cast Concrete Panel Exterior Wall
	Aluminum Exterior Windows
	Steel Exterior Entrance Doors
	Overhead Exterior Utility Doors

The roofing for the building(s) at this campus consists of:

01 - Main Building:	Built-Up Roofing With Ballast
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Interior

The interior systems for the building(s) at this campus include:

01 - Main Building:	Interior Demountable Partitions
	Wood Interior Doors
	Overhead Interior Coiling Doors
	Interior Door Hardware
	Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Painted Ceilings
	Ceramic Tile Wall
	Wood Wall Paneling
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Quarry Tile Flooring
	Wood Flooring
	Rubber Tile Flooring



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01 - Main Building:	Vinyl Composition Tile Flooring
	Carpet

Mechanical

The mechanical systems for the building(s) at this campus include:

01 - Main Building:	1,275 MBH Cast Iron Water Boiler
	150 MBH Gas Furnace
	400 MBH Gas Furnace
	10 kW Electric Unit Heater
	Finned Wall Radiator
	Pneumatic Heating System Controls
	3 Ton Ductless Split System
	5 Ton Outside Air Cooled Condenser
	5 Ton Condensing Unit
	7.5 Ton Condensing Unit
	Window Units
	15 HP VFD
	25 HP VFD
	2-Pipe Hot Water Hydronic Distribution System
	1 HP or Smaller Pump
	5 HP Pump
	10 HP Pump
	25 HP Pump
	20,000 CFM Interior AHU
	Ductwork
	Large Roof Exhaust Fan
	Small Roof Exhaust Fan
	Wall Exhaust Fan
	Fire Sprinkler System

Plumbing

The plumbing systems for the building(s) at this campus include:

01 - Main Building:	100 Gallon Water Storage Tank
	1,000 Gallon Water Storage Tank
	4" Backflow Preventers
	Gas Piping System
	52 Gallon Electric Water Heater
	100 Gallon Gas Water Heater
	Domestic Water Piping System
	Classroom Lavatories
	Lavatories



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01 - Main Building:	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Showers
	Toilets
	Urinals
	Air Compressor (5 hp)
	15,000 Gallon Underground Fuel Oil Storage Tank

Electrical

The electrical systems for the building(s) at this campus include:

01 - Main Building:	100 kW Emergency Generator
	Solar Panels
	Automatic Transfer Switch
	1,600 Amp Switchgear
	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	400 Amp Distribution Panel
	600 Amp Distribution Panel
	800 Amp Distribution Panel
	Electrical Disconnect
	Building Mounted Lighting Fixtures
	Canopy Mounted Lighting Fixtures
	Light Fixtures



Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

Priority 1 – Mission Critical Concerns: Deficiencies or conditions that may directly affect the school's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

Priority 2 – Indirect Impact to Educational Mission: Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

Priority 3 – Short-Term Conditions: Deficiencies that are necessary to the school's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

Priority 4 – Long-Term Requirements: Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

Priority 5 – Enhancements: Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, replacing carpet, improved signage, or other improvements to the facility environment.



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The following chart summarizes this site's current deficiencies by building system and priority. The listing details current deficiencies including deferred maintenance, functional deficiencies, code compliance, capital renewal, hazardous materials and technology categories.

Table 1: System by Priority

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	-	-	\$57,115	\$345,825	\$416,108	\$819,048	6.56 %
Roofing	-	\$2,483,102	-	-	-	\$2,483,102	19.90 %
Structural	-	-	-	-	-	\$0	0.00 %
Exterior	-	\$674,931	-	\$53,477	\$778,887	\$1,507,295	12.08 %
Interior	-	-	\$3,217,561	\$1,897,954	\$15,977	\$5,131,492	41.13 %
Mechanical	-	\$209,880	\$14,472	-	-	\$224,353	1.80 %
Electrical	\$4,208	-	-	\$14,359	\$23,660	\$42,228	0.34 %
Plumbing	-	-	-	-	\$219,278	\$219,278	1.76 %
Fire and Life Safety	\$56,658	-	-	-	-	\$56,658	0.45 %
Technology	-	-	\$1,836,321	-	-	\$1,836,321	14.72 %
Conveyances	-	-	-	-	-	\$0	0.00 %
Specialties	-	-	\$4,533	\$76,873	\$76,488	\$157,893	1.27 %
Total	\$60,866	\$3,367,913	\$5,130,002	\$2,388,488	\$1,530,399	\$12,477,669	

*Displayed totals may not sum exactly due to mathematical rounding

The building systems with the most need include:

Interior	-	\$5,131,492
Roofing	-	\$2,483,102
Technology	-	\$1,836,321

The chart below represents the building systems and associated deficiency costs.

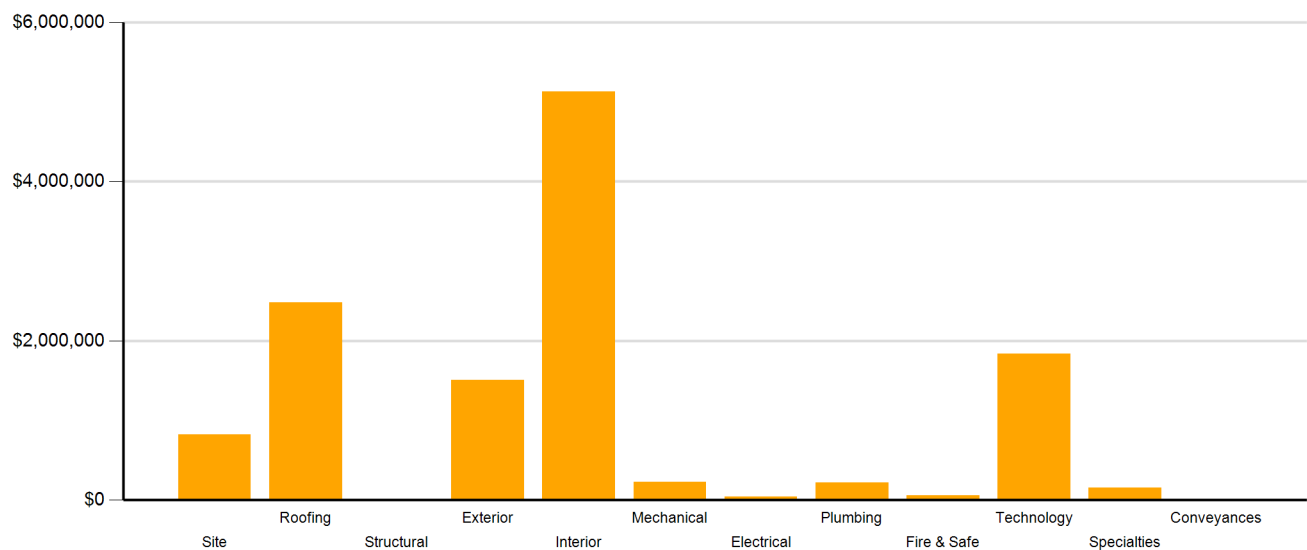


Figure 2: System Deficiencies



Current Deficiencies by Category

Deficiencies have been further grouped according to the observed category.

- **Acoustics** deficiencies relate to room acoustics, sound insulation, and mechanical systems and vibration control modeled after ANSI/ASA Standard S12.60-2010 and ASHRAE Handbook, Chapter 47 on Sound and Vibration Control.
- **Barrier to Accessibility** deficiencies relate to the Americans with Disabilities Act and the Rhode Island Governors Commission on Disability. Additional items related to accessibility may be included other categories.
- **Capital Renewal** items have reached or exceeded serviceable life and require replacement. These are current and do not include life cycle capital renewal forecasts. Also included are deficiencies correcting planned work postponed beyond its regular life expectancy.
- **Code Compliance** deficiencies related to current codes. Many may fall under grandfather clauses, which allow buildings to continue operating under codes effective at the time of construction. However, there are instances where the level of renovation requires full compliance which are reflected in the master plan.
- **Educational Adequacy** deficiencies identify where facilities do not align with the Basic Education Program and the RIDE School Construction Regulations.
- **Functional Deficiencies** are deficiencies for components or systems that have failed before the end of expected life or are not the right application, size, or design.
- **Hazardous Materials** include deficiencies for building systems or components containing potentially hazardous material. The team focused on identifying asbestos containing building materials (ACBMs), lead based painted (LBP) areas, polychlorinated biphenyls (PCBs), and chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. With other scopes of work there may be other costs associated with hazardous materials.
- **Technology** deficiencies relate to network architecture, technology infrastructure, classroom systems, and support. Examples of technology deficiencies include: security cameras, secure electronic access, telephone handsets, and dedicated air conditioning for telecommunication rooms.
- **Traffic** deficiencies relate to vehicle or pedestrian traffic, such as bus loops, crosswalks, and pavement markings.



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The following chart and table represent the deficiency category by priority. This listing includes current deficiencies for all building systems.

Table 2: Deficiency Category by Priority

Category	Priority					Total
	1	2	3	4	5	
Acoustics	-	-	-	\$62,389	-	\$62,389
Barrier to Accessibility	-	-	\$148,546	-	-	\$148,546
Capital Renewal	-	\$3,367,913	\$3,140,601	\$2,019,378	\$947,240	\$9,475,132
Code Compliance	-	-	-	-	-	\$0
Educational Adequacy	\$60,866	-	\$100,851	\$57,905	\$583,160	\$802,782
Functional Deficiency	-	-	-	-	-	\$0
Hazardous Material	-	-	-	\$248,815	-	\$248,815
Technology	-	-	\$1,740,003	-	-	\$1,740,003
Traffic	-	-	-	-	-	\$0
Total	\$60,866	\$3,367,913	\$5,130,002	\$2,388,488	\$1,530,399	\$12,477,669

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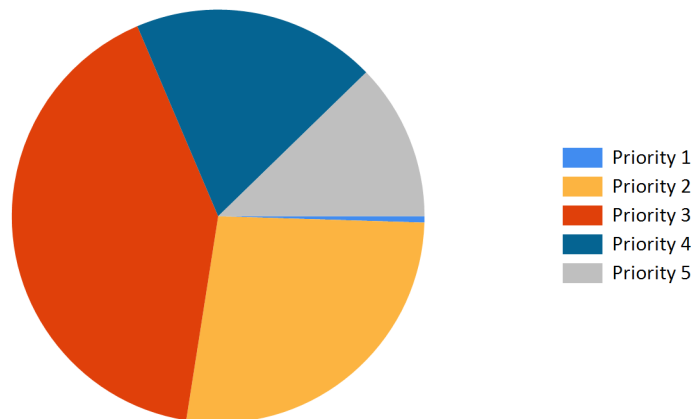


Figure 3: Current deficiencies by priority



Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If a need for immediate replacement was identified, a deficiency was created with the estimated repair costs. The identified deficiency contributes to the facility's total current repair costs.

Capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a 5-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might reach the end of its life before a planned construction project occurs.

The following chart shows all current deficiencies and the subsequent 5-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

Table 3: Capital Renewal Forecast

System	Current Deficiencies	Life Cycle Capital Renewal Projections					LC Yr. 1-5 Total	Total 5-Year Need
		Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021		
Site	\$819,048	\$0	\$0	\$0	\$0	\$0	\$0	\$819,048
Roofing	\$2,483,102	\$0	\$0	\$0	\$0	\$0	\$0	\$2,483,102
Structural	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$1,507,295	\$0	\$0	\$0	\$0	\$0	\$0	\$1,507,295
Interior	\$5,131,492	\$0	\$0	\$550,392	\$0	\$73,565	\$623,957	\$5,755,450
Mechanical	\$224,353	\$0	\$0	\$936,202	\$1,068,355	\$25,950	\$2,030,507	\$2,254,860
Electrical	\$42,228	\$0	\$0	\$0	\$8,271	\$82,102	\$90,373	\$132,601
Plumbing	\$219,278	\$0	\$0	\$0	\$132,793	\$9,245	\$142,038	\$361,316
Fire and Life Safety	\$56,658	\$0	\$0	\$0	\$0	\$0	\$0	\$56,658
Technology	\$1,836,321	\$0	\$0	\$0	\$0	\$0	\$0	\$1,836,321
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$157,893	\$0	\$0	\$0	\$0	\$0	\$0	\$157,893
Total	\$12,477,669	\$0	\$0	\$1,486,594	\$1,209,419	\$190,862	\$2,886,875	\$15,364,544

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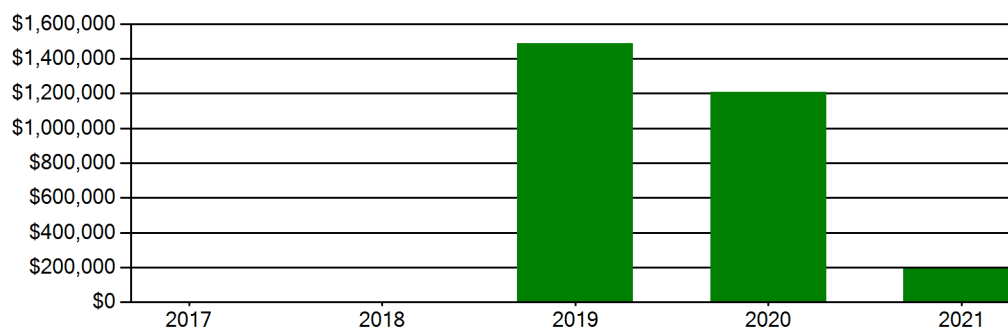
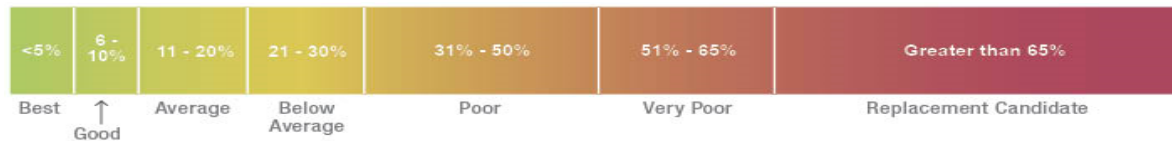


Figure 4: Life Cycle Capital Renewal Forecast



Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building's health. Since 1991, the facility management industry has used an index called the FCI to benchmark the relative condition of a group of schools. The FCI is derived by dividing the total repair cost, including educational adequacy and site-related repairs, by the total replacement cost. A facility with a higher FCI percentage has more need, or higher priority, than a facility with a lower FCI. It should be noted that costs in the New Construction category are not included in the FCI calculation.



Financial modeling has shown that over a 30-year period, it is more cost effective to replace than repair schools with a FCI of 65 percent or greater. This is due to efficiency gains with facilities that are more modern and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on property owners and facility managers approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement, or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making school facility decisions.

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. A 5-year FCI was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCI calculation.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today's estimated cost of construction in the Providence, Rhode Island area. The estimated replacement cost for this facility is \$45,738,000. For planning purposes, the total 5-year need at the John F. Deering Middle School is \$15,374,324 (Life Cycle Years 1-5 plus the FCI deficiency cost). The John F. Deering Middle School facility has a 5-year FCI of 33.59%.

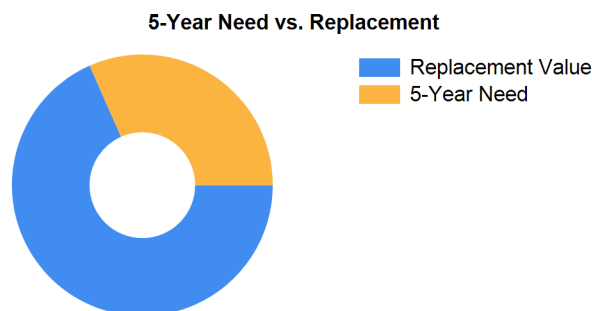


Figure 5: 5-Year FCI

It is important to reiterate that this FCI replacement threshold is not conclusive, but is intended to initiate planning discussion in which other relevant issues with regard to a facility's disposition must be incorporated. This merely suggests where conversations regarding replacement might occur.



Rhode Island Aspirational Capacity

The capacity of a school reflects how many students the school's physical facility can effectively serve. There are various methodologies that exist to calculate capacity. It is not uncommon to review an existing building only to find that the capacity that had once been assigned is greater than what can be reasonably accommodated today. This is primarily because of a change in how programs are delivered.

The Rhode Island Aspirational Capacity is based on the Rhode Island School Construction Regulations (SCRs) and is an aspirational goal of space use. The capacity for each individual public school in the state of Rhode Island was designed to conform to Section 1.06-2 Space Allowance Guidelines of the Rhode Island Department of Education (RIDE) SCRs. These regulations outline the allowed gross square feet (GSF) per student at each school type (ES, MS, HS) by utilizing a sliding scale based on projected enrollment. The resulting capacities reflect how school capacities align to the SCRs for new construction. The existing enrollment was multiplied by the GSF per student for the appropriate bracket. For the purposes of this analysis, Pre-K centers were rolled into the elementary totals, and K-8 facilities were counted as middle schools.

The most consistent and equitable way a state can determine school capacities across a variety of districts and educational program offerings is to use square-foot-per-student standards. In contrast, in the 2013 Public Schoolhouse Assessment Report, LEAs self-reported capacities for their elementary, middle and high schools. Districts typically report "functional capacity," which is defined as the number of students each classroom can accommodate. Functional capacity counts how many students can occupy a space, not how much room students and teachers have within that space. For example, a 650-square-foot classroom and a 950-square-foot classroom can both have a reported capacity of 25 students, but the actual teaching and learning space per student varies greatly.

The variation in square feet per student impacts the kinds of teaching practices possible in each space. The lowest allocation of space per student restricts group and project-based learning strategies and requires teachers to teach in more traditional, lecture-style formats, due to a lack of space. Furthermore, the number of students that can be accommodated in a classroom does not account for access to sufficient common spaces such as libraries, cafeterias, and gymnasiums. When cafeterias are undersized relative to the population, schools must host four or more lunch periods a day, resulting in some students eating lunch mid-morning and some mid-afternoon. Similarly, undersized libraries and gymnasiums create scheduling headaches for schools and restrict student access. Finally, a classroom count-only approach to school capacity does not consider the inherent scheduling challenges schools face.

Applying the Rhode Island Aspirational Capacity, a facility of this size could ideally support an enrollment of approximately 762 students.

Facility New Construction

As part of the Educational Program Space Assessment, select core spaces were compared to the RI School Construction Regulations. If it was determined that a facility was in need of square footage related to a cafeteria or library/media center, a cost for additional space was estimated. This cost is not included in the total 5-year need or the 5-year FCI calculation.

The New Construction cost to bring the John F. Deering Middle School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be \$1,270,922.



Summary of Findings

The John F. Deering Middle School comprises 138,600 square feet and was constructed in 1971. Current deficiencies at this school total \$12,487,449. Five year capital renewal costs total \$2,886,875. The total identified need for the John F. Deering Middle School (current deficiencies and 5-year capital renewal costs) is \$15,374,324. The 5-year FCI is 33.59%.

Table 4: Facility Condition by Building

	Gross Sq Ft	Year Built	Current Deficiencies	LC Yr. 1-5 Total	Total 5 Yr Need (Yr 1-5 + Current Defs)	5-Year FCI
John F. Deering Middle School Totals	138,600	1971	\$12,487,449	\$2,886,875	\$15,374,324	33.59%

**Displayed totals may not sum exactly due to mathematical rounding*

The following pages provide a listing of all current deficiencies and 5-year life cycle need and the associated costs, followed by photos taken during the assessment.

Cost Estimating

Cost estimates are derived from local cost estimating expertise and enhanced by industry best practices, historical cost data, and relevance to the Rhode Island region. Costs have been developed from current market rates as of the 2nd quarter in 2016. All costs are based on a replace-in-kind approach, unless the item was not in compliance with national or state regulations or standards.

For planning and budgeting purposes, facility assessments customarily add a soft cost multiplier onto deficiency repair cost estimates. This soft cost multiplier accounts for costs that are typically incurred when contracting for renovation and construction services. Soft costs typically include construction cost factors, such as contractor overhead and profit, as well as labor and material inflation, professional fees, and administrative costs. Based on the Rhode Island School Construction Regulations, a soft cost multiplier of 20% is included on all cost estimates. Other project allowances are included in the cost estimates based on school attributes such as age, location, and historic designation. All stated costs in the assessment report will include soft costs for planning and budgeting purposes. These are estimates, and costs will vary at the time of construction.



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Site Level Deficiencies

Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Asphalt Walks Require Replacement Note: Asphalt sidewalks are cracked and weathered.	Capital Renewal	5,347	SF	3	\$57,115	19412
Asphalt Paving Requires Replacement Note: Asphalt roadway pavement is alligatored and deteriorated.	Capital Renewal	35	CAR	4	\$144,748	19411
Asphalt Paving Requires Replacement Note: Parking lot asphalt is cracked and weathered.	Capital Renewal	40	CAR	4	\$165,426	19413
Backstops Require Replacement Note: Backstops Require Replacement	Educational Adequacy	1	Ea.	4	\$35,651	28621
Exterior Basketball Goals are Required Note: Exterior Basketball Goals are Required	Educational Adequacy	1	Ea.	5	\$7,308	28823
School lacks a competition track. Note: School lacks a competition track.	Educational Adequacy	1	Ea.	5	\$408,800	28280
Sub Total for System		6	items		\$819,048	
Sub Total for School and Site Level		6	items		\$819,048	

Building: 01 - Main Building

Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Built-up Roofing With Aggregate Ballast Requires Replacement Note: Original BUR is old and there is evidence of water in the building and staining at building overhangs.	Capital Renewal	62,685	SF	2	\$2,483,102	19426
Sub Total for System		1	items		\$2,483,102	

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Aluminum Window Requires Replacement Note: Single pane windows are poorly functioning. They are scheduled for replacement.	Capital Renewal	2,312	SF	2	\$407,548	19418
The Metal Exterior Door Requires Replacement Note: Exterior metal doors are old and rusted. They are scheduled to be replaced.	Capital Renewal	40	Door	2	\$267,384	19416
The Concrete/CMU Exterior Requires Repair Note: Concrete is cracked and spalling in several areas.	Capital Renewal	600	LF	4	\$53,477	19415
The Exterior Requires Painting Note: Exterior paint is worn, chipped and peeling.	Capital Renewal	135,828	SF Wall	5	\$778,887	19414
Sub Total for System		4	items		\$1,507,295	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Existing Door Hardware Is Not ADA Compliant Note: Non-compliant door hardware should be replaced. Location: Doors between classroom, closets, teacher rooms, main office and guidance	Barrier to Accessibility	50	Door	3	\$148,546	19424
The Acoustical Ceiling Tiles Require Replacement Note: Ceiling tiles are stained, cracked, and sagging.	Capital Renewal	124,740	SF	3	\$1,173,546	19419
The Carpet Flooring Requires Replacement Note: Carpet is worn, stained, and fraying at seams.	Capital Renewal	55,440	SF	3	\$1,256,420	19420
The Vinyl Composition Tile Requires Replacement Note: VCT flooring is chipped and worn with seams lifting in many areas.	Capital Renewal	53,478	SF	3	\$639,048	19421
Ceiling Grid Requires Replacement Note: Ceiling grid is old, stained, and rusted.	Capital Renewal	124,740	SF	4	\$1,541,124	19431
Interior Ceramic Walls Require Repair Or Replacement Note: Ceramic tile walls are chipped and broken.	Capital Renewal	800	SF Wall	4	\$22,183	19425
Light Deterioration or Damage of 9x9 Asbestos Floor Tile is Present	Hazardous Material	3,348	SF	4	\$99,467	Rollup



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Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each)	Hazardous Material	364	Ea.	4	\$108,142	Rollup
Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet)	Hazardous Material	642	LF	4	\$15,259	Rollup
Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet)	Hazardous Material	21	SF	4	\$208	Rollup
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. AND NOT in children-accessible area (measurement unit - linear feet)	Hazardous Material	18	LF	4	\$428	Rollup
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. AND NOT in children-accessible area (measurement unit - square feet)	Hazardous Material	2,515	SF	4	\$24,906	Rollup
Partitions Provide Insufficient Sound Isolation	Acoustics	2,100	SF	4	\$62,389	27820
Note: Classrooms with Partitions						
Room Lighting Is Inadequate Or In Poor Condition.	Educational Adequacy	588	SF	4	\$22,254	Rollup
Vinyl Cove Base Requires Replacement	Capital Renewal	100	LF	4	\$1,188	19427
Wall/ceiling materials - area < 9 sq. ft. AND in children-accessible area	Hazardous Material	17	SF	4	\$168	Rollup
Wall/ceiling materials - large areas (> 10 sq. ft.) of damage & area in active use - children	Hazardous Material	24	SF	4	\$238	Rollup
Classroom Door Requires Vision Panel	Educational Adequacy	4	Ea.	5	\$9,065	Rollup
Room lacks appropriate sound control.	Educational Adequacy	200	SF	5	\$6,912	Rollup
Sub Total for System		19 items			\$5,131,492	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Condenser Requires Replacement	Capital Renewal	1	Ea.	2	\$14,449	19428
The Fin Tube Water Radiant Heater Requires Replacement	Capital Renewal	112	Ea.	2	\$195,432	19429
Note: Heaters are aged with heavy rust.						
The Large Diameter Exhausts/Hoods Require Replacement	Capital Renewal	1	Ea.	3	\$14,472	19423
Sub Total for System		3 items			\$224,353	

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room last power shut-off valves for utilities	Educational Adequacy	3	Ea.	1	\$4,208	Rollup
The Canopy Lighting Requires Replacement	Capital Renewal	10	Ea.	4	\$14,359	19422
Room Has Insufficient Electrical Outlets	Educational Adequacy	48	Ea.	5	\$23,660	Rollup
Sub Total for System		3 items			\$42,228	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks a drinking fountain.	Educational Adequacy	4	Ea.	5	\$4,382	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	31	Ea.	5	\$46,544	Rollup
Underground Fuel/Oil Storage Tank Requires Replacement	Capital Renewal	1	Ea.	5	\$168,353	22067
Sub Total for System		3 items			\$219,278	

Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks shut-off valves for utilities. (International Fuel Gas Code, Section 409.6)	Educational Adequacy	5	Ea.	1	\$56,658	Rollup
Sub Total for System		1 items			\$56,658	

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	17	Ea.	3	\$96,318	Rollup
Technology: Campus network switching electronics are antiquated and/or do not meet standards.	Technology	264	Ea.	3	\$130,721	18055
Technology: Classroom AV/Multimedia systems are in need of improvements.	Technology	50	Ea.	3	\$495,155	18065



Facility Condition Assessment

West Warwick - John F. Deering Middle School

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life.	Technology	1	Ea.	3	\$20,797	18066
Technology: Instructional spaces do not have local sound reinforcement.	Technology	51	Ea.	3	\$252,529	18070
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	1	Ea.	3	\$5,546	18060
Technology: Intermediate Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	1	Ea.	3	\$4,952	18062
Technology: Main Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	1	Ea.	3	\$9,408	18058
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards.	Technology	401	Ea.	3	\$178,701	18056
Technology: Network system inadequate and/or near end of useful life	Technology	3	Ea.	3	\$23,767	18068
Technology: Network system inadequate and/or near end of useful life	Technology	45	Ea.	3	\$222,820	18069
Technology: PA/Bell/Clock system is inadequate and/or near end of useful life.	Technology	138,600	SF	3	\$247,062	18067
Technology: Special Space AV/Multimedia system is inadequate.	Technology	1	Ea.	3	\$56,448	18064
Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements.	Technology	1	Ea.	3	\$7,922	18059
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements.	Technology	1	Ea.	3	\$4,952	18061
Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus.	Technology	50	Ea.	3	\$79,225	18063
Sub Total for System		16	items		\$1,836,321	

Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient writing area.	Educational Adequacy	1	Ea.	3	\$4,533	Rollup
The Metal Student Lockers Require Replacement Location: First floor corridor and lockers in girls showers	Capital Renewal	150	Ea.	4	\$76,873	19430
Room lacks an appropriate refrigerator.	Educational Adequacy	9	Ea.	5	\$76,488	Rollup
Sub Total for System		3	items		\$157,893	
Sub Total for Building 01 - Main Building		53	items		\$11,658,621	
Total for Campus		59	items		\$12,477,669	



John F. Deering Middle School - Life Cycle Summary Yrs 1-5

Building: 01 - Main Building

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Painting and Coating	Painting/Staining (Bldg SF)	83,300	SF	\$550,392	3
Suspended Plaster and	Painted ceilings	2,772	SF	\$11,595	5
Wall Paneling	Wood Panel wall	6,790	SF	\$61,970	5
Sub Total for System		3	items	\$623,957	

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Heating System Supplementary Components	Controls - Pneumatic (Bldg.SF)	138,600	SF	\$936,202	3
Facility Hydronic Distribution	2-Pipe Water System (Hot)	138,600	SF	\$1,068,355	4
Decentralized Cooling	Condensing Unit (7.5 Ton)	1	Ea.	\$14,593	5
Decentralized Cooling	Condensing Unit (5 Ton)	1	Ea.	\$11,357	5
Sub Total for System		4	items	\$2,030,507	

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	6	Ea.	\$8,271	4
Electrical Service	Switchgear - Main Dist Panel (1600 Amps)	1	Ea.	\$82,102	5
Sub Total for System		2	items	\$90,373	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Refrigerated Drinking Fountain	18	Ea.	\$132,793	4
Domestic Water Equipment	Backflow Preventers - 4 in. (Ea.)	1	Ea.	\$9,245	5
Sub Total for System		2	items	\$142,038	
Sub Total for Building 01 - Main Building		11	items	\$2,886,876	
Total for: John F. Deering Middle School		11	items	\$2,886,876	



Supporting Photos



Exterior Finishes



Chipped Exterior Paint



Spalling And Cracked Concrete



Peeling Exterior Paint



Facility Condition Assessment

West Warwick - John F. Deering Middle School



Cracked Asphalt Sidewalk



Spalling On Pier



Rusted Exterior Door



Alligatored Asphalt Roadway



Site Aerial



Cracked Asphalt Paving



Facility Condition Assessment

West Warwick - John F. Deering Middle School



Wood Shop



Main Entry



Typical Classroom



Cafeteria



Music Room



Band Room



Facility Condition Assessment

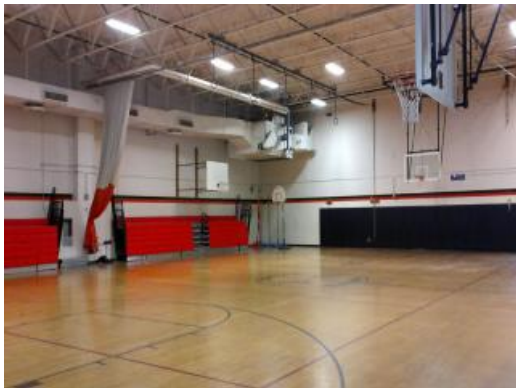
West Warwick - John F. Deering Middle School



Cooking Room



Science Room



Gymnasium



North Elevation



Library



Northwest Elevation



Facility Condition Assessment

West Warwick - John F. Deering Middle School



Weight Room



Northwest Elevation



Gymnasium



Toilet Partitions



Art Room



Damaged Ceiling Tiles



Facility Condition Assessment

West Warwick - John F. Deering Middle School



Peeling Exterior Paint



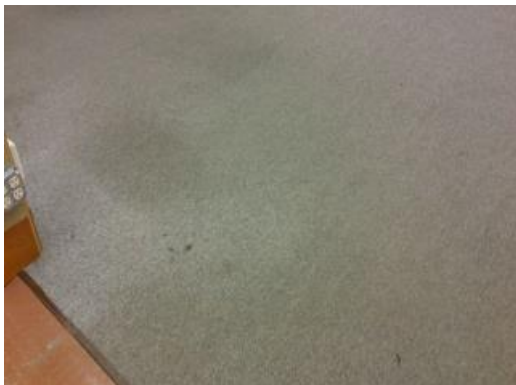
Worn Carpet



Stained Ceiling Tiles



Chipped VCT



Worn Carpet



Heavily Rusted Exhaust

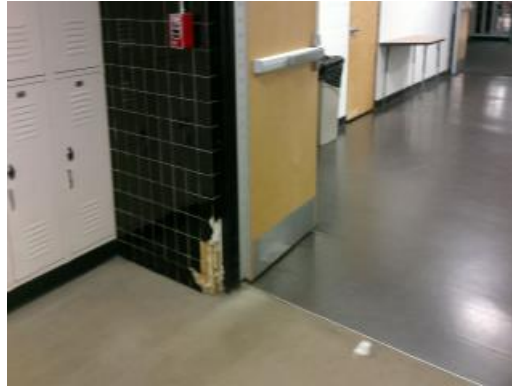


Facility Condition Assessment

West Warwick - John F. Deering Middle School



Worn VCT



Broken Ceramic Wall Tile



Non-Compliant Door Hardware



Peeling Vinyl Cove Base



Built-Up Roof



Old And Damaged Lockers



Facility Condition Assessment

West Warwick - John F. Deering Middle School



Weathered Condensing Unit



Exterior Metal Door



Stained Ceiling Grid